IN THE CLAIMS

Kindly amend claims 1-6 and 8-11 as shown in the following claim listing:

1. (currently amended) A converter circuit comprising:

- at least a first switching element (T_1) and a second switching element (T_2) and an inductive element (L),

- wherein a control device (26) is provided to alternately switch the switching elements (T_1, T_2) so that a current (I_L) flows through the inductive element (L),

- and wherein at least at the second switching element (T_2) there is provided a freewheeling diode (D_2) which is capable of conducting the current flowing through the inductive element (L) after turn-off of the first switching element (T_1),

- wherein the control device (26) controls ~~the~~ a timing of driving the switching elements (T_1, T_2) upon switching from the second switching element (T_2) to the first switching element (T_1) by determining whether one of a shoot through current occurs ~~or~~ and the freewheeling diode (D_2) is conducting,

- wherein, ~~in the case~~ upon the occurrence of a shoot through current, the drive is changed such that the turn on of the first switching element (T_1) takes place later with respect to the instant of turn off of the second switching element (T_2),

- and, ~~if~~ when the freewheeling diode (D_2) is conducting, the drive is changed such that the turn on of the first switching element (T_1) takes place sooner with respect to the instant of turn off of the second switching element (T_2).

2. (currently amended) A converter circuit as claimed in claim 1, wherein

- the switching elements (T_1, T_2) are driven such that they are simultaneously conducting during a period of overlap ($\Delta t_{overlap}$),

- and wherein the control device (26) controls the duration of the period of overlap ($\Delta t_{overlap}$) in that it is determined whether one of a shoot through current occurs ~~or~~ and the freewheeling diode (D_2) is conducting,

- wherein, ~~in the case~~ upon the occurrence of a shoot through current, the duration of the period of overlap is reduced,

- and, ~~if~~ when the freewheeling diode (D_2) is conducting, the duration of the period of overlap is increased.

3. (currently amended) A converter circuit as claimed in claim 1, wherein

- the control device (26) comprises means for measuring ~~the~~ a voltage (V_{T2}) across the second switching element (T_2), the

voltage (V_{T2}) being observed at least after turn-off of the second switching element (T_2),

- and it is determined, by means of ~~the~~ a voltage variation, whether one of a shoot through current occurs ~~or~~ and the freewheeling diode (D_2) is conducting.

4. (currently amended) A converter circuit as claimed in claim 3, wherein

- the second switching element (T_2) is a MOSFET in a housing,

- wherein at least connecting lines for the drain, the source and the gate are led from the housing to ~~the~~ an exterior,

- wherein one or more ~~additional~~ measuring lines are provided for determining the voltage (V_{T2}) between the drain and the source.

5. (currently amended) A converter circuit as claimed in claim 3, wherein

- ~~the~~ a peak value ($\hat{V}_{T2}$) is determined ~~of the~~ from an oscillating voltage obtained after turn-off of the second switching element (T_2),

- and the timing of the drive of the switching elements (T_1, T_2) is set such that said peak value ($\hat{V}_{T2}$) is minimized.

6. (currently amended) A converter circuit as claimed in claim 3, wherein

- a minimum value of the voltage (V_{T2}) across the second switching element (T_2) is determined,
- and the timing of driving the switching elements (T_1, T_2) is set such that the minimum value of the ~~minimum~~ voltage lies between ~~the~~ a forward voltage of the second switching element (T_2) and ~~the~~ a forward voltage of the freewheeling diode (D_2).

7. (previously presented) A converter circuit as claimed in claim 1, wherein

- the control device comprises means for measuring at least one electrical quantity (V_{T2}) of the converter circuit (12),
- in the course of at least a first switching period (T) at least one measurement is carried out,
- and said measurement is used to set the timing of driving the switching elements (T_1, T_2) in a second switching period.

8. (currently amended) A converter circuit as claimed in claim 1, wherein

- at ~~the~~ an onset of operation, upon switching from the second to the first switching element, a dead time is provided

between the turn off of the second switching element (T_2) and the turn on of the first switching element (T_1).

9. (currently amended) A converter circuit as claimed in claim 1, wherein

- upon switching from the second switching element (T_2) to the first switching element (T_1)
- the first switching element (T_1) is driven in such a way, for a protection period that lasts at least until the turn-off of the second switching element (T_2), that the current through the first switching element (T_1) cannot exceed a threshold value ($I_{T1,max}$),
- which threshold value ($I_{T1,max}$) lies above ~~the~~ a nominal output current of the converter circuit.

10. (currently amended) A ~~drive device for a~~ converter circuit as claimed in claim 1, further comprising:

- a device for alternately driving at least a first switching element (T_1) and a second switching element (T_2)
- and a device for determining whether one of a shoot through current occurs ~~or~~ and a freewheeling diode (T_2) is conducting,

- ~~the~~ a timing of driving ~~the~~ first and second switching elements (T_1, T_2) upon switching from the second switching element (T_2) to the first switching element (T_1) being controlled such that ~~in the event~~ upon the occurrence of a shoot through current the drive is changed such that the turn on of the first switching element (T_1) takes place later ~~with respect to~~ than the instant of turn off of the second switching element (T_2), and ~~if~~ when the freewheeling diode (D_2) is conducting, the drive is changed such that the turn on of the first switching element (T_1) takes place ~~sooner with respect to~~ before the instant of turn off of the second switching element (T_2).

11. (currently amended) A drive method for a converter switch comprising at least one half bridge (12) with a first and a second switching element (T_1, T_2), in which at least at the second switching element (T_2) a freewheeling diode (D_2) is provided, wherein

- ~~the~~ a timing of switching of the switching elements (T_1, T_2) upon switching from the second switching element (T_2) to the first switching element (T_1) is controlled,
- wherein it is determined whether one of the freewheeling diode (D_2) ~~is conducting or~~ conducts and a shoot through current occurs,

- wherein, ~~in the event~~ upon the occurrence of a shoot through current, the turn on of the first switching element (T_1) takes place later with respect to the instant of turn off of the second switching element (T_2),
- and, ~~if~~ when the freewheeling diode (D_2) is conducting, the turn on of the first switching element (T_1) takes place sooner with respect to the instant of turn off of the second switching element (T_2).